THE NAUTILUS

PHYSA AND BULINUS OF MAURITIUS BY WILLIAM J. CLENCH

A radula examination of Physa borbonica Fér. (M.C.Z. 79129) from Mauritius establishes this species as a true Physa and not a Bulinus. Diagnostic characters of the shells are not certain with the majority of these forms, and all the so-called species of Physa from Africa, Asia and the Indo-Pacific region must first be examined anatomically to be absolutely certain of their generic position. Though first described from Reunion (Bourbon), this species is now known also from Mauritius and the Seychelles.

Sganzin also employed the name borbonica for this species from the same locality, Bourbon, not being aware that Férussac had described it several years before under the same name. The synonomy of this species is as follows:

Physa borbonica Fér.

- Physa borbonica Férussac, Bull. Sci. Indus. Vol. 10, 1827 p. 408. (Bourbon.)
- -----nana Potiez et Michaud, Galerie des Mollus-1838 ques, Paris. Vol. 1, pl. 22, fig. 17-18, p. 225. Mauritius.
- -----borbonica Sganzin, Mem. Soc. Nat. Hist. 1842
- Strasbourg. Vol. 3, pt. 2, p. 18. (Bourbon.) ——scychellana E. v. Martens, (in) Reisen in Ost-Afrika, 1857-1865, von C. C. Von der Decken. 1869 Vol. 3, pl. 2, fig. 3, p. 60. (Seychelles.)
- 1880

E. v. Martens (Mollusken Mauritius u. Seychellen, 1880, p. 210) places Bulinus cernicus (Morelet) in the synonomy of Isidora' forskali (Ehren). Cotypes of Morelet's species (M.C.Z. 79127) are certainly differentiated enough from the typical form as to warrant its retention as a variety. The synonomy would be as follows.

THE NAUTILUS

Bulinus forskalii cernicus (Morelet)

- 1867 Physa cernica Morelet, Journ. de Conch. Vol. 15, p. 440. (Mauritius.)
- 1880 Isidora forskalii Ehren. E. v. Martens, Mollusken Mauritius u. Seychellen, p. 210.

SPHAERIUM SCOPOLI; SULCASTRUM, NEW SUBGENUS, AND S. FALLAX, NEW SPECIES

BY V. STERKI

S. sulcatum Lam, holds a peculiar position. It has been grouped with the subgenus Cyrenastrum Bgt., i. e. with solidum Normand and most of the nearctic Sphaeria. S. Clessin, in his monograph of the "Cycladeen", 1879, placed it under the subgenus Sphaeriastrum Bgt, with S. rivicola Leach. It is remote from both groups, and represents a subgenus for which the name Sulcastrum is proposed. The differences are mainly in the surface sculpture, constant in all of its forms, and wanting in all other Sphaeria. It is densely, microscopically rugulose, dullish all over; the striae, or costulae, are fine, sharp, crowded, regular to subregular; also, the nepionic young are considerably larger. All of this could mean just specific differences; but, with a great amount of material at hand, it appears that sulcatum is not only a species very variable, but a group: there are some forms constantly different and distinct, ergo species. Two have been described: S. crassum, in the NAUTILUS XIV, p. 140, 1901, and S. lineatum, ibidem, XXIII, p. 142, 1910; another is described below.

Sphaerium fallax, n. sp., differs from sulcatum as follows: The beaks are more anterior, broad; anterior margin r. abrupt to subtruncate, the posterior part markedly

¹ See Pilsbry & Bequaert, 1927. Bull. Am. Mus. Nat. Hist. Vol. 53, p. 133, for a complete statement relative to the status of *Isidora* and *Bulinus*.